

# Incidence of male genital vitiligo

## Report of a screening programme

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**SUMMARY** One thousand consecutive new male patients attending a clinic for sexually transmitted diseases were screened with Wood's light for the presence of genital vitiligo. Two patients had idiopathic vitiligo and one probable occupational vitiligo.

### Introduction

Vitiligo presents as a relatively mild disability in fair-skinned persons although some patients experience undue redness of the skin when exposed to strong sunlight. However, in those of dark complexion and in races where darkness of the skin is characteristic the condition can have considerable adverse affect on the patient's personal and social image. Vitiligo may also be a pointer to the co-existence of autoimmune disease<sup>1</sup> and can also occur as the result of occupational exposure to certain phenols and catechols. This may produce either a localised form from limited skin contact or a disseminated form, morphologically indistinguishable from idiopathic vitiligo, due to systemic absorption of the offending chemical.<sup>2</sup>

While genital depigmentation is well recognised in idiopathic vitiligo, there seems to be little information on its incidence. However, in a recent series of 54 men with occupational vitiligo 38 had either scrotal or penile lesions.<sup>3</sup> The vitiligo in these cases was thought to be mainly due to inhalation, but contact factors may also have been relevant.

The purpose of this study was to try and establish the incidence of genital vitiligo and its relationship to vitiligo at other sites and to autoimmune disease by examining 1000 men of working age (over 21 years). The incidence of vitiligo is about 1% in the world population<sup>4</sup> but varies in different countries. The onset of vitiligo occurs before the age of 20 in about half the persons affected.<sup>5</sup> In 1000 adult patients, therefore, the expected incidence would be between 5 and 10 cases.

### Patients and methods

One thousand new male patients, aged 21 or over, attending a clinic for sexually transmitted diseases were studied. The lower abdomen and genital area were examined in daylight then in a totally darkened room under Wood's light, which can reveal vitiligo not apparent in daylight.<sup>3</sup> Any patients who had apparent loss of light reflection were referred to a dermatologist for re-examination and assessment and were examined totally with the Wood's light to see if vitiligo could be detected at other sites. These patients were also given a detailed questionnaire concerning their general health and any personal and family history of autoimmune disease and of possible occupations involving exposure to phenols and catechols. Blood was taken for organ-specific antibody screening.

### Results

Twelve patients were referred to a dermatologist for further screening with the Wood's light and for a second opinion; of these, it was considered that nine did not have vitiligo. In six patients depigmentation was caused by scarring from previous injury—for example, by a zip fastener—from previous inflammation—for example, an abscess—or as a result of stretch scars from a tight prepuce. Three patients had some alteration of texture and light reflection of the skin within the normal range, but this was not considered to be vitiligo. Three patients were found to have genital vitiligo but had not presented with this complaint. One 41-year-old man with marked vitiligo limited to the penis had been exposed over a period of 11 years in his work to a phenolic compound, which probably caused his vitiligo. Unfortunately he would not reattend for antibody

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screening or further investigation. Two men, aged 21 and 50 years, were found to have idiopathic vitiligo of the penis; further examination of their body surface revealed vitiligo of the hands and ankles in the older man only. The scrotum was not affected in either of these men. Organ-specific antibody screening gave a negative result in both cases.

### Discussion

Genital vitiligo was detected in natural light and confirmed under Wood's light in three of 1000 men studied. It is likely that regular screening of male adults in this Newcastle clinic would yield about 18 cases annually.

The association between vitiligo and autoimmune disease is well established. The incidence of thyroid antibodies in men with vitiligo has been reported to be 23%,<sup>1</sup> so it is not surprising that organ-specific antibodies were not found in our two patients; in occupational vitiligo there is apparently no increase in the incidence of these antibodies.<sup>3</sup>

The detection of one case of probable chemically induced vitiligo suggests that patients with this

unusual occupational disease may conceivably present and be recognised in STD clinics, so leading to their being given advice about exposure to the offending chemical.

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